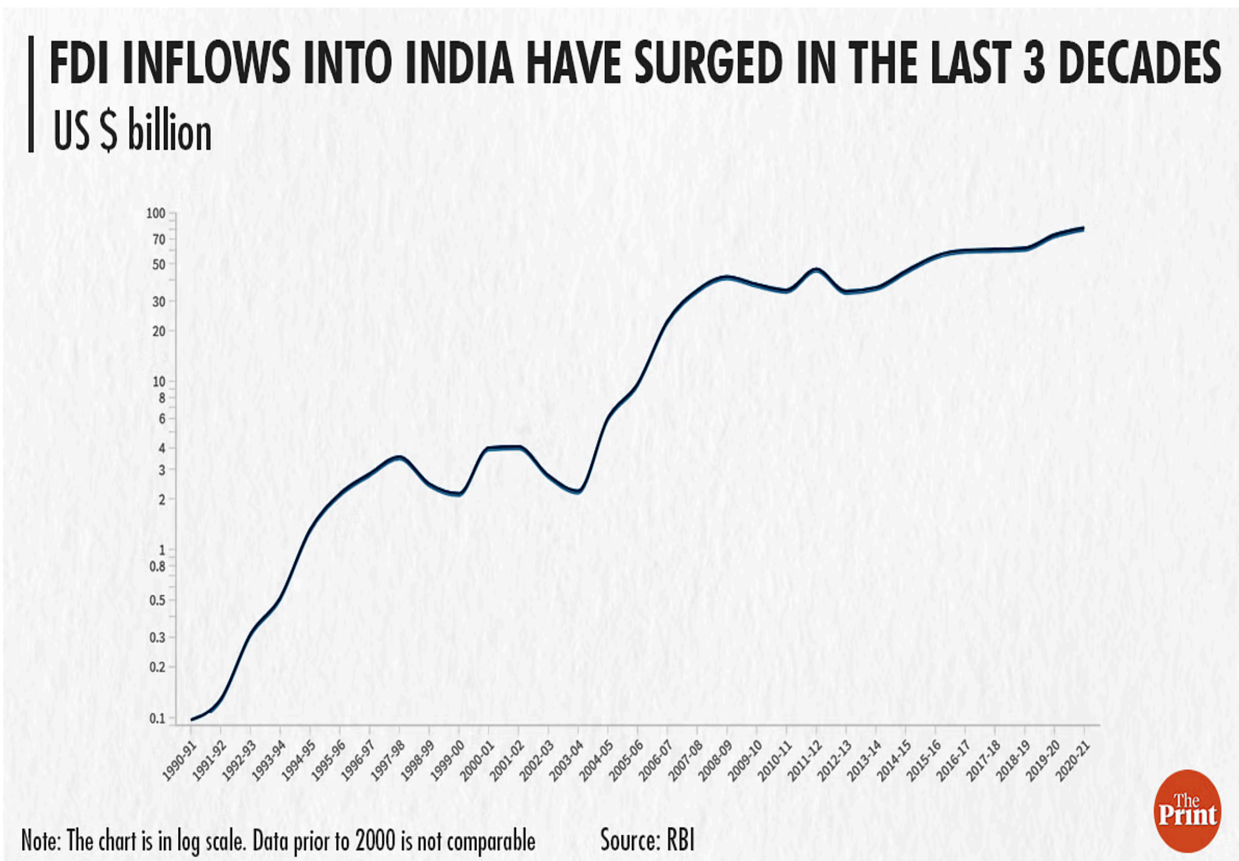
AIL4070

Fundamentals of Economics
Economics of Ideas with Data

Analysis of Effects and Trends of FDI in India



Project Report by :

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Introduction

An important non-debt financial source for India's economic development has been foreign direct investment (FDI), which is a major force behind economic growth. Foreign direct investment (FDI) refers to a stake of ownership acquired by an investor, organization, or government from another nation in a foreign company or undertaking. In other words, FDI is an ownership stake in a foreign company or project made by an investor, company, or government from another country. (Hayes, 2023)

Foreign corporations invest in India to benefit from the country's particular investment privileges such as tax breaks and comparatively lower salaries. This helps India develop technological know-how and create jobs as well as other benefits. These investments have been coming into India because of the government's supportive policy framework, vibrant business climate, rising global competitiveness and economic influence.

India's FDI inflows have increased 20 times from 2000-01 to 2021-22. According to the Department for Promotion of Industry and Internal Trade (DPIIT), India's cumulative FDI inflow stood at US$ 919.633 billion between April 2000-March 2023, mainly due to the government's efforts to improve the ease of doing business and relax FDI norms.

India also had major FDI inflows during April 2000- March 2023, coming from Mauritius at US$ 163.87 billion with a total share of 26%, followed by Singapore at 23% (US$ 148.16 billion), the USA at 9%, (US$ 60.19 billion), Netherlands at 7%, (US$ 43.75 billion) and Japan at 6%, (US$ 38.74 billion). The state that received the highest FDI during this period was

Maharashtra (US$ 53.97 billion), followed by Karnataka (US$ 44.46 billion), Gujarat (US$ 31.90 billion), Delhi (US$ 25.19 billion), and Tamil Nadu (US$ 8.50 billion).

Historical Background

The historical evolution of FDI reveals its roots in the post-World War II era when nations sought to rebuild and establish economic ties for mutual benefit. Conceptually, FDI represents a commitment beyond mere financial transactions; it embodies a strategic alignment of interests between nations. FDI underscores the interconnectedness of global economies, emphasizing collaboration and shared prosperity. The transition process from communism-central planning, to capitalism-open economy, in most of the transition countries has gone through structural and dramatic changes. Domestic capital, in most of these transition countries, was incapable of meeting the huge investment needs that transition required. In the early stages of the transition process, the importance of Foreign Direct Investments (FDI) is seen as crucial and a top priority for policy makers. In general, the practice of FDI attraction usually incorporated numerous fiscal and monetary incentives. (Zeqiri & Bajrami, 2016)

In the pre-liberalization period, India had followed an extremely cautious and selective approach while formulating FDI policy. The historical background of FDI in India can be traced back with the establishment of the East India Company of Britain. The British capital came to India during the colonial era. Before independence, major FDI came from the British companies. After the second world war, Japanese companies entered the Indian Market. After independence, issues relating to foreign capital, MNCs, gained attention of policy makers. The industrial policy of 1965, allowed MNCs to venture through technical collaboration in India. The govt. has provided many incentives such as tax concessions, simplified licensing etc to boost the FDI inflows. In fact, in the early nineties, the Indian

> **Investment climate in India has improved considerably since the opening up of the economy in 1991.**
>
> This is primarily attributed to ease in FDI rules in India. India, today is a part of the top 100 clubs on Ease of Doing Business (EoDB). **FDI inflows in India** stood at $45.15 bn in 2014-15 and have consistently increased since then.

economy faced a severe balance of payment crisis. India was left with that much amount of foreign exchange reserves which can finance its three weeks of imports. In this critical face of the Indian economy, economic reforms were made in 1991 and India opened its doors of FDI inflows and adopted a more liberal foreign policy to restore the confidence of foreign investors .

Importance

FDI has emerged as a vital catalyst for India's economic growth. Understanding the trends in FDI can provide insights into the factors driving economic expansion and stability. A thorough analysis of FDI trends enables us to identify sectors experiencing substantial job growth, contributing to a more nuanced understanding of its impact on employment.

Hypothesis

1. Effect of FDI on Employment Rates:
   - Job Creation Stability: Can an increase in FDI consistently lead to stable job creation in the specific sector in India, or are there fluctuations in employment rates over time?

2. Effect of FDI on Net Production:
   - Sustainable Production Growth: Does the increase in FDI result in sustained and scalable growth in net production, or are there diminishing returns or potential production peaks?

Past Researches and Findings

1. FDI & Unemployment Rate
    - There is a maximum of one cointegration between Foreign Direct Investment (FDI) and unemployment rate, according to the results of the Johansen cointegration test. (Karimov, Parádi-Dolgos & Koroseczné Pavlin, 2020)
    - The outcomes of the Granger Causality test indicated the relationship of unidirectional causation between Foreign Direct Investment (FDI) and rate of unemployment. (Karimov, Parádi-Dolgos & Koroseczné Pavlin, 2020)

- Consequently, it has been demonstrated that FDI reduces the unemployment rate of the host nation determined by a number of significant factors.

2. FDI & Net Production
    - In the case of Brazil, South Korea, Peru and Mexico, it was found that there is no causal link between FDI and GDP in those countries, only in the case of China that relationship is found but contrary to the predicted direction, GDP growth is which causes an increase in FDI and not vice versa. (Encinas-Ferrer & Villegas-Zermeño, 2015)

Conceptual and Theoretical Background

Foreign direct investment includes mergers and acquisitions, building new facilities, reinvesting profits earned from overseas operations, and intra company loans. In a narrow sense, foreign direct investment refers just to building new facilities, and a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. FDI is the sum of equity capital, long-term capital, and short-term capital as shown in the balance of payments.

FDI usually involves participation in management, joint-venture, transfer of technology and expertise. Stock of FDI is the net (i.e., outward FDI minus inward FDI) cumulative FDI for any given period. Direct investment excludes investment through purchase of shares (if that purchase results in an investor controlling less than 10% of the shares of the company).

The greatest contribution to the study of FDI is by Stephen Hymer. His seminal dissertation (1960) was to escape from the intellectual straitjacket of neo-classical-type trade and financial theory, and move us towards an analysis of the multinational enterprise (MNE) based upon industrial organization theory.

The pioneering conceptual insight of Hymer was to break out of the arid mold of international trade and investment theory and focus attention upon the MNE per se. This permits us to treat FDI as a modality by which firms extend their territorial horizons abroad. The unique feature of

FDI is a mechanism by which the MNE maintains control over productive activities outside its national boundaries, that is, FDI means international production. In this view, FDI is more than a process by which assets or claims are exchanged internationally. Hymer's great insight was in focusing attention upon the MNE as the institution for international production, rather than international exchange.

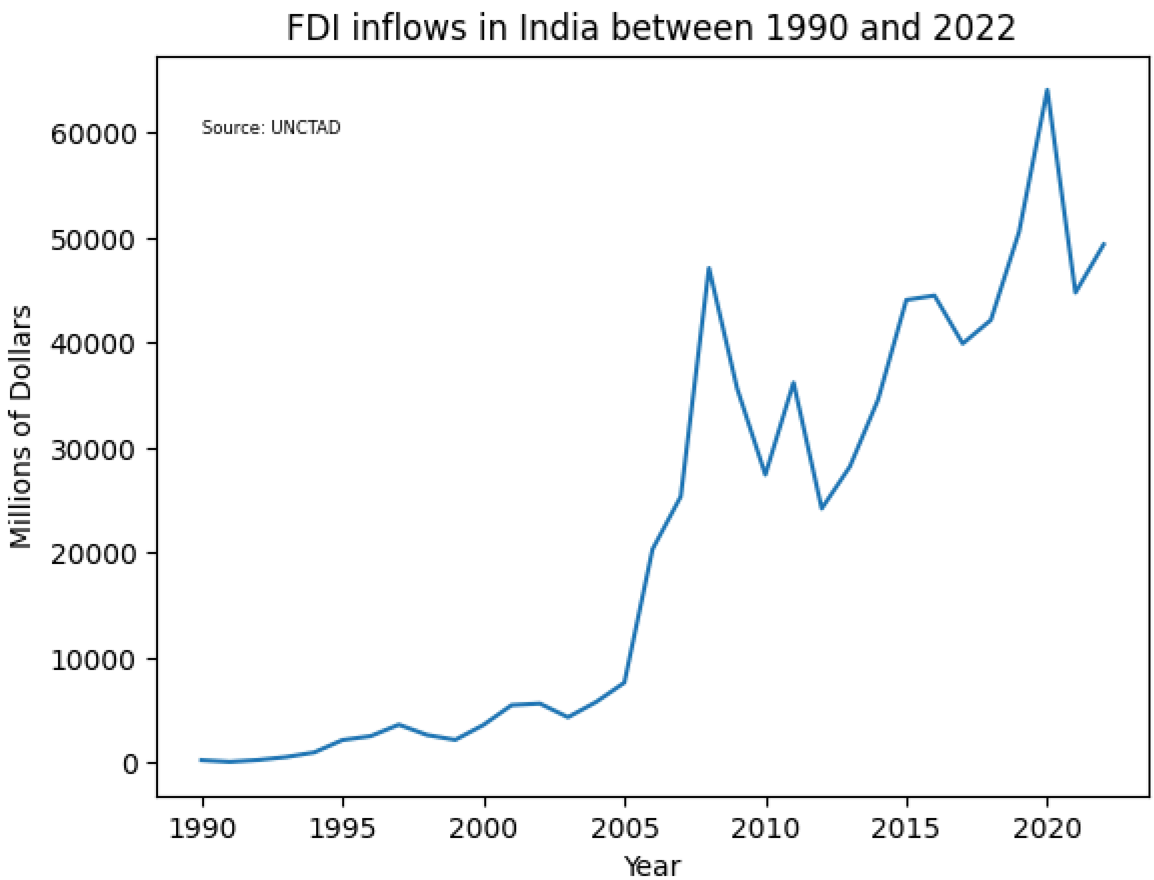
Hymer's main conclusion is that foreign direct investment can only succeed as long as there are market imperfections that can create advantages and conflicts: companies could reduce their competition by implementing foreign direct investment. In this way, companies can eliminate the arising conflicts in the market and benefit from their specific advantages. (Wikipedia contributors, 2023)

Foreign Direct Investment (FDI) is a key driver of the growth in the Indian economy in the context of other developing countries. FDI inflow is the investment made by enterprises through joint ventures (JV) or mergers & acquisitions (M&A), to carry out business activities in host countries. Advantages of FDI inflow include:

- building physical capital,
- developing the skill of the domestic labour force,
- employment generation,
- increasing productive capacity and
- technology transfer and integration of the domestic economy with the world economy (Jayakumar, Kannan, & Anbalagan, 2014).

This is significant especially for a developing country like India because FDI aims to positively contribute to its growth and development.

Data related to FDI in India



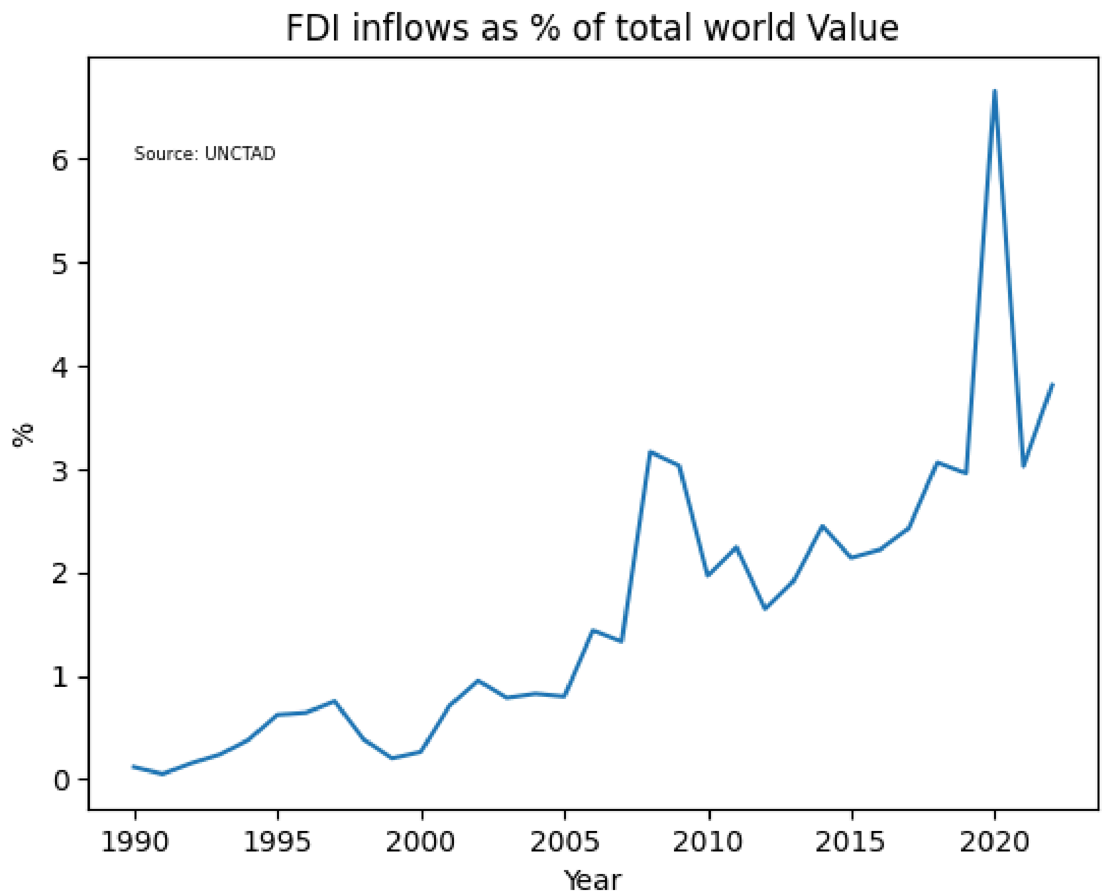
Mean FDI inflow: $21391 Millions = $21 Billions

Median FDI inflow: $20327 Millions = $20 Billions

Max FDI inflow: $64072 Millions = $64 Billions

Min FDI inflow: $75.0 Millions

Standard Deviation: $19916 Millions = $20 Billions



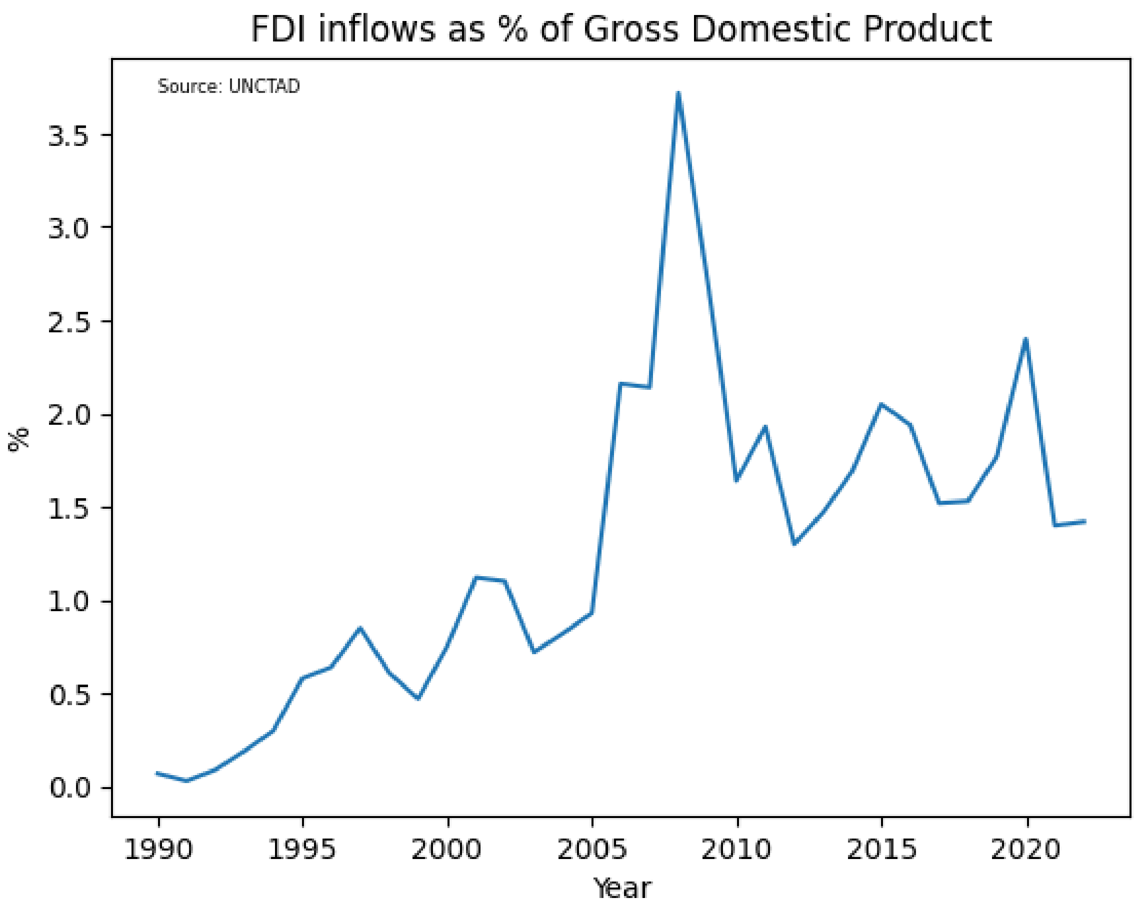
Mean FDI inflow as % of total world value: 1.62 %

Median FDI inflow as % of total world value: 1.33 %

Max FDI inflow as % of total world value: 6.66 %

Min FDI inflow as % of total world value: 0.049 %

Standard Deviation: 1.42



Mean FDI inflow as % of GDP: 1.27 %

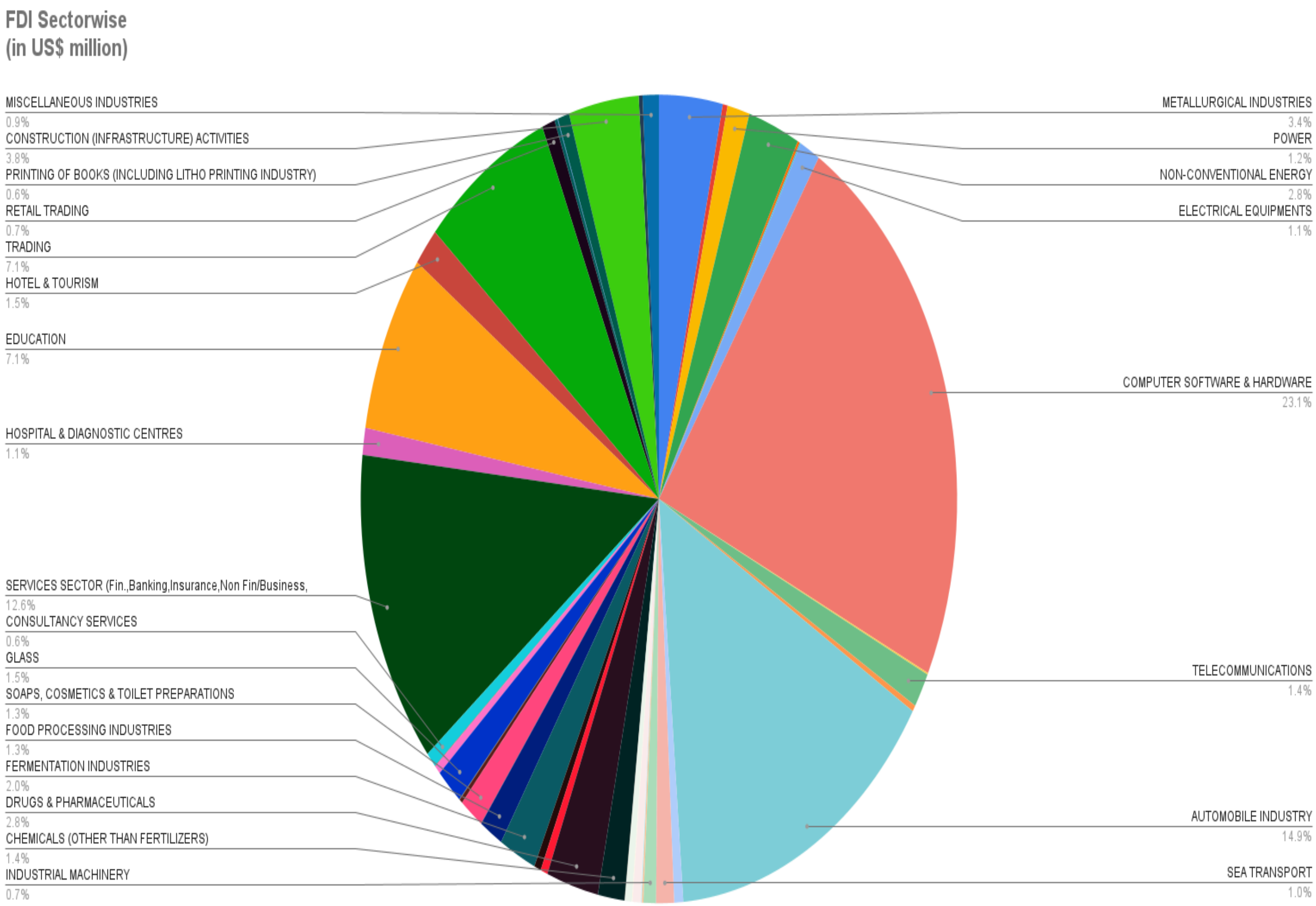
Median FDI inflow as % of GDP: 1.3 %

Max FDI inflow as % of GDP: 3.72 %

Min FDI inflow as % of GDP: 0.03 %

Standard Deviation: 0.84

STATEMENT ON SECTOR WISE FDI EQUITY INFLOWS FROM APRIL 2021 TO NOVEMBER 2021



Analyzing sector wise correlation between FDI inflows and employment

SECTOR WISE FDI EQUITY INFLOWS

FROM APRIL 2020 TO NOVEMBER 2020

OF 5 Different Sectors

Sector	FDI (in US$ million)
CONSTRUCTION	7874.54
TRADING	2608.22
EDUCATION	1250.37
SERVICES SECTOR (Fin.,Banking,Insurance,Non Fin/Business,Outsourcing,R&D,Courier,Tech. Testing and Analysis, Other)	5060.22
COMPUTER SOFTWARE & HARDWARE	26144.69

SECTOR WISE FDI EQUITY INFLOWS

FROM APRIL 2021 TO NOVEMBER 2021

OF 5 Different Sectors

Sector	**FDI (in US$ million)**
CONSTRUCTION	7075.65
TRADING	2,797.48
EDUCATION	2,800.20
SERVICES SECTOR (Fin.,Banking,Insurance,Non Fin/Business,Outsourcing,R&D,Courier,Tech. Testing and Analysis, Other)	4,948.00
COMPUTER SOFTWARE & HARDWARE	9,063.56

Employment data based on Quarterly Employment Survey (QES) of Labour Bureau

Sectors	First Round of QES (1st April 2021)		Second Round of QES (1st July 2021)		Third Round of QES (1st October 2021)	
	% of Workers	Estd. Total Workers	% of Workers	Estd. Total Workers	% of Workers	Estd. Total Workers
Construction	2.4	7,54,569	2.0	6,07,013	2.0	6,19,227
Education	21.8	6,729,769	22.0	68,47,572	22.0	69,26,315
Trade	6.6	2,048,169	5.3	16,45,934	5.3	16,81,085
Financial Services	5.7	1,769,457	2.8	8,73,336	2.8	8,85,001
IT	6.7	2,078,969	10.7	33,21,288	11.0	34,56,839

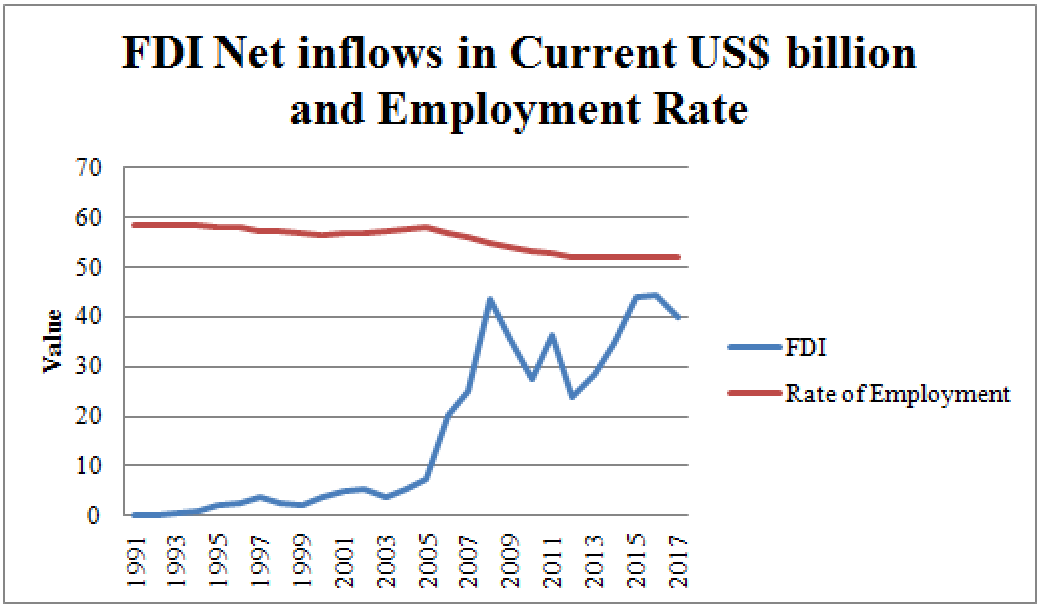
As observed in the above data of employment and FDI inflows, a correlation is seen between employment and FDI inflows. FDI inflows have increased in the Trade and education sector while it has decreased in construction, services and IT. Similar trends can be seen in employment. Generally, when FDI inflows have increased, the employment rate has increased and vice versa.

The deviation in the trade sector in those times could be due to covid pandemic where international trade was ceased which resulted in decrease in employment despite an increase in FDI inflow.

The drastic change in the IT/computer science sector could be due to re-opening of trade offline which resulted in less consumption of online IT services.

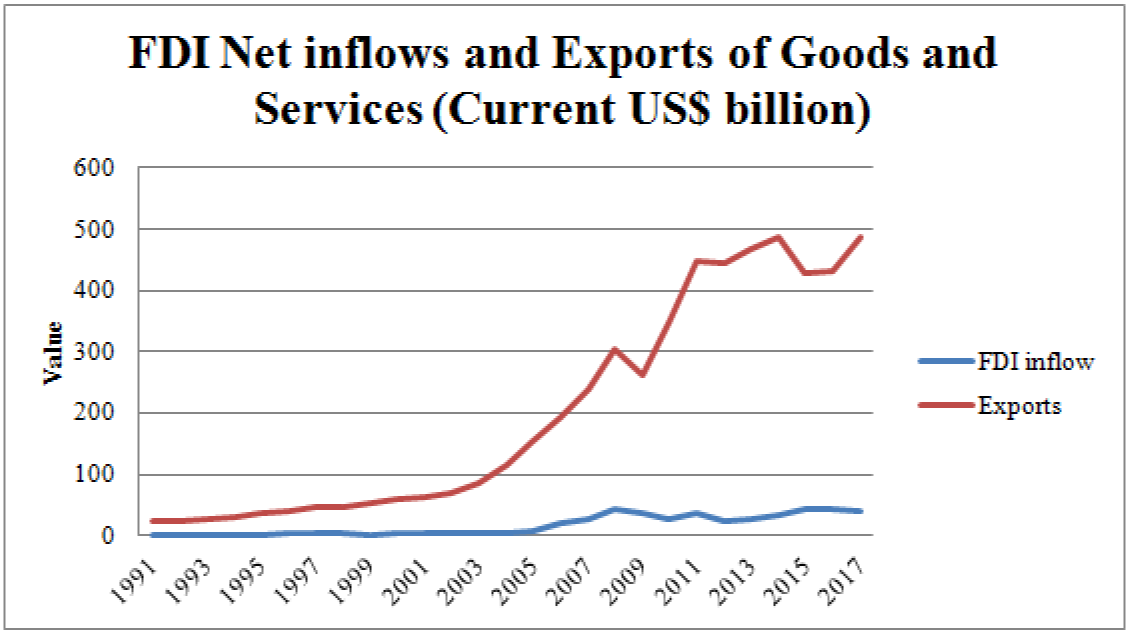
Impact of FDI inflow on the macroeconomic indicators of India

Impact on the employment rate

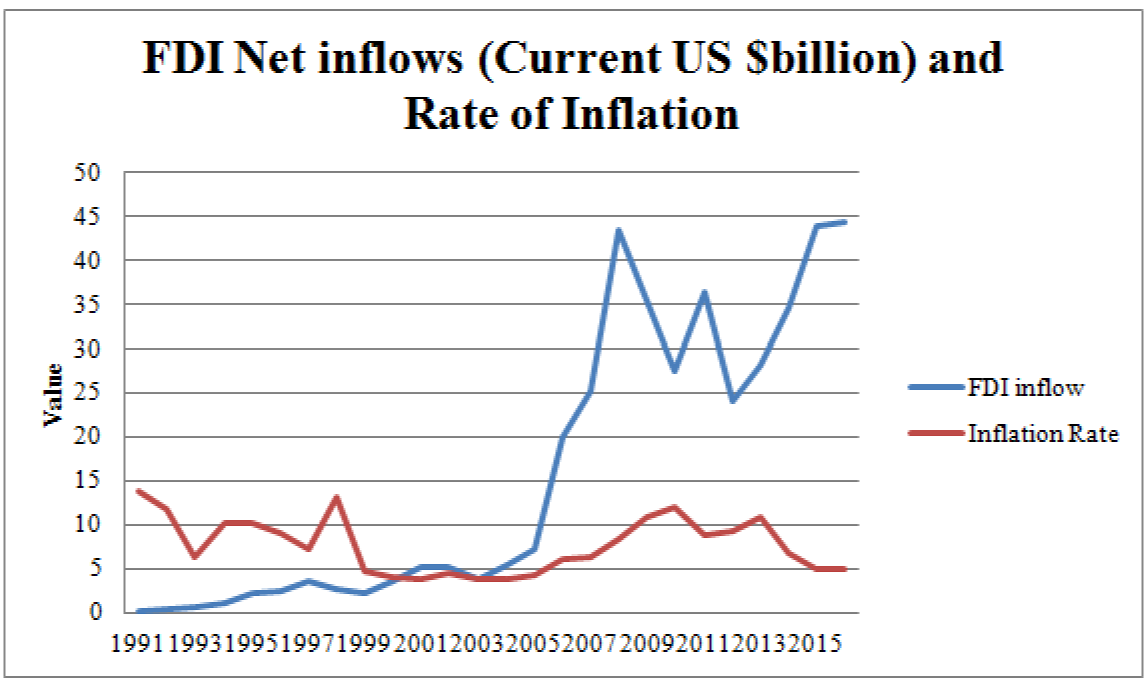


Due to the decreasing trend of the employment rate, it is not conclusive that increasing **FDI** inflow has any positive impact. One of the reasons for this is that the effect of **FDI** inflow in the reduction of unemployment was significant in the private service sector only whereas FDI did not help to reduce unemployment in the public sector (Khatodia & Dhankar, 2016)

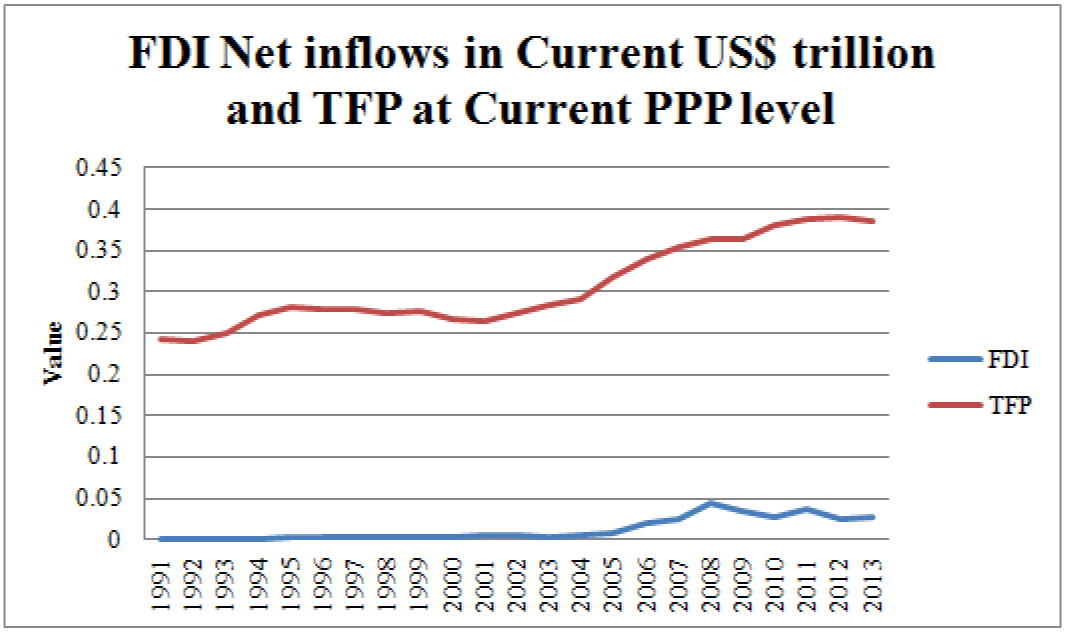
Impact on the exports of India



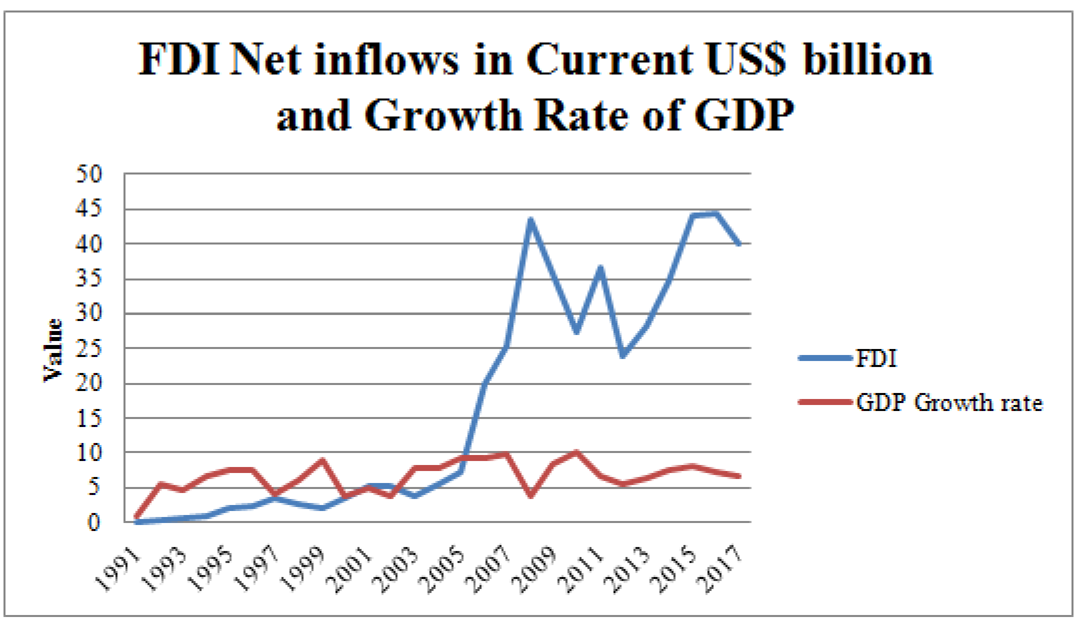
Impact on the inflation rate



Impact on the total factor productivity of India



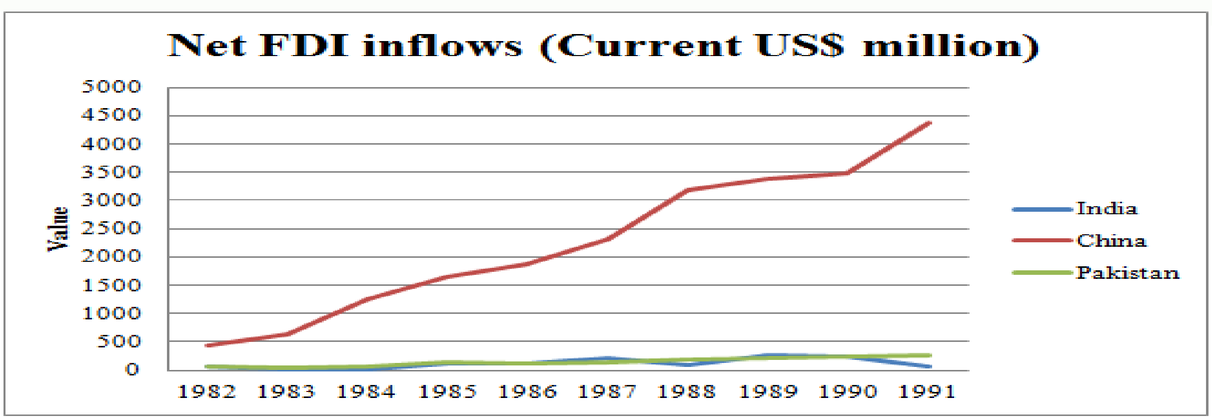
Impact on GDP



The trend of FDI inflow in India between the pre and post-economic liberalization

The Indian economy is currently one of the biggest recipients of FDI, but it has not always been so. After India gained independence in 1947, the Government started formulating National Five-Year Plans to strategize its growth path. Although the trade policies of the Government consisted of measures undertaken for export promotion, the infant industry argument and import substitution policies protected the domestic industries against foreign competition. Trade was restricted because of a combination of licenses, quotas, and permits. The role of the private sector in the economy was limited and the economic conditions were not conducive for foreign investment. As a result of these restrictive policies, the FDI inflow in the country was small. In the financial year ending in March 1991, the FDI inflow in India was a mere US$ 73 million (World Bank, 2018). Compared to this, China and Pakistan were way ahead in attracting inward FDI at that time. In China, for example, the net inflow of FDI inflow was US$ 4.36 billion in 1991. In Pakistan, it was US$ 258 million, more than 3.5 times that in India.

FDI in China was a major component of its liberalization policies and economic reforms which started in the early 1980s'. FDI acted as a stimulant for the economic growth of China by adding to the stock of capital and complementing domestic investment (Tang, Selvanathan, & Selvanathan, 2008). Similarly, in Pakistan, FDI supplemented domestic investment and had a significant effect on the country's economic growth (Ghazali, 2010).



Net inflows of **FDI** in India, China and Pakistan from 1982 to 1991 (Source: World Bank)

Conclusion

The relationship of **FDI** with macroeconomic indicators and the trends of GDP, exports and total factor productivity in India till 2017 suggests that FDI is responsible for fostering Indian economic growth. India enjoys relative advantages in attracting FDI compared to other countries due to its cheap labor resulting from a low inflation rate and geographical proximity to OECD countries. On one hand, the high growth rate of GDP in the post-reform period raised the return on investment. This helped to attract foreign investors and bring **FDI** which, on the other hand, impacted the growth rate of GDP.

According to recent reports, inward **FDI** in developing countries outweighs that in developed countries. To a large extent, it is attributed to the developing economies of Asia, including China and India. In India, new foreign direct investment policies announced in 2017 by the Department of Industrial Policy and Promotion (DIPP) are important steps in boosting the morale of foreign investors. Therefore, the increasing trend of **FDI** is expected to continue in the coming years.

Data Sources

https://pib.gov.in/newsite/PrintRelease.aspx?relid=199821

https://pib.gov.in/PressReleasePage.aspx?PRID=1794840

https://unctadstat.unctad.org/datacentre/dataviewer/US.FdiFlowsStock

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Libraries and Tools used for rough work

Python libraries such as Matplotlib, Seaborn were used for visualization purposes.

Pandas were used to extract and deal with data sources.